

THAT WHICH IS CLAIMED:

1. An isolated polypeptide having an amino acid sequence selected from the group consisting of:
- 5 (a) The amino acid sequence shown in SEQ ID NO 1;
- (b) The amino acid sequence encoded by the cDNA contained in ATCC Deposit No. _____;
- (c) The amino acid sequence of an allelic variant of the amino acid sequence shown in SEQ ID NO 1;
- 10 (d) The amino acid sequence of an allelic variant of the amino acid sequence encoded by the cDNA contained in ATCC Deposit No. _____;
- (e) The amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO 1, wherein the sequence variant is encoded by a nucleic acid molecule hybridizing to the nucleic acid molecule shown in SEQ ID NO
- 15 2 under stringent conditions;
- (f) The amino acid sequence of a sequence variant of the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. _____, wherein the sequence variant is encoded by a nucleic acid molecule hybridizing under stringent conditions to the cDNA contained in ATCC Deposit No. _____;
- 20 (g) The amino acid sequence of the mature receptor polypeptide from about amino acid 6 to amino acid 370, shown in SEQ ID NO 1;
- (h) The amino acid sequence of the mature polypeptide from about amino acid 6 to amino acid 370, encoded by the cDNA clone contained in ATCC Deposit No. _____;
- 25 (i) The amino acid sequence of the polypeptide shown in SEQ ID NO 1, from about amino acid 1 to about amino acid 23;
- (j) The amino acid sequence from about amino acid 1 to about amino acid 23 in the polypeptide encoded by the cDNA contained in ATCC Deposit No. _____;
- (k) The amino acid sequence of an epitope bearing region of any one of
- 30 the polypeptides of (a)-(l).

2. An isolated antibody that selectively binds to a polypeptide of claim 1, (a)-(k).

3. An isolated nucleic acid molecule having a nucleotide sequence selected from the group consisting of:

- 5 (a) The nucleotide sequence shown in SEQ ID NO 2;
(b) The nucleotide sequence in the cDNA contained in ATCC Deposit No. ____;
(c) A nucleotide sequence encoding the amino acid sequence shown in SEQ ID NO 1;
10 (d) A nucleotide sequence encoding the amino acid sequence encoded by the cDNA contained in ATCC Deposit No. ____; and
(e) A nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c), or (d).

15 4. An isolated nucleic acid molecule having a nucleotide sequence selected from the group consisting of:

- (a) A nucleotide sequence encoding an amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO 1 that hybridizes to the nucleotide sequence shown in SEQ ID NO 2 under stringent conditions;
20 (b) A nucleotide sequence encoding the amino acid sequence of a sequence variant of the amino acid sequence encoded by the cDNA contained in ATCC Deposit No. ____, the nucleic acid sequence of the sequence variant hybridizing to the cDNA contained in ATCC Deposit No. ____ under stringent conditions; and
25 (c) A nucleotide sequence complementary to either of the nucleotide sequences in (a) or (b).

5. A nucleic acid vector comprising the nucleic acid sequences in any of claims 3-4.

30 6. A host cell containing the vector of claim 5.

7. A method for producing any of the polypeptides in claim 1 comprising introducing a nucleotide sequence encoding any of the polypeptide sequences in (a)-(k) into a host cell, and culturing the host cell under conditions in which the proteins are expressed from the nucleic acid.

8. A method for detecting the presence of any of the polypeptides in claim 1 in a sample, said method comprising contacting said sample with an agent that specifically allows detection of the presence of the polypeptide in the sample and then detecting the presence of the polypeptide.

9. The method of claim 8, wherein said agent is capable of selective physical association with said polypeptide.

10. The method of claim 9, wherein said agent binds to said polypeptide.

11. The method of claim 10, wherein said agent is an antibody.

12. The method of claim 10, wherein said agent is a ligand.

13. A kit comprising reagents used for the method of claim 8, wherein the reagents comprise an agent that specifically binds to said polypeptide.

14. A method for detecting the presence of any of the nucleic acid sequences in any of claims 3-4 in a sample, the method comprising contacting the sample with an oligonucleotide that hybridizes to the nucleic acid sequences under stringent conditions and determining whether the oligonucleotide binds to the nucleic acid sequence in the sample.

15. The method of claim 14, wherein the nucleic acid, whose presence is detected, is mRNA.

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16. A kit comprising reagents used for the method of claim 14, wherein the reagents comprise a compound that hybridizes under stringent conditions to any of the nucleic acid molecules.

5 17. A method for identifying an agent that binds to any of the polypeptides in claim 1, said method comprising contacting the polypeptide with an agent that binds to the polypeptide and assaying the complex formed with the agent bound to the polypeptide.

10 18. The method of claim 17 wherein a fragment of the polypeptide is contacted.

15 19. A method for modulating the activity of any of the polypeptides in claim 1, the method comprising contacting any of the polypeptides of claim 1 with an agent under conditions that allow the agent to modulate the activity of the polypeptide.

20 20. The method of claim 19 wherein said modulation is in cells derived from tissues selected from the group consisting of brain, spleen, lung, kidney, skeletal muscle, liver and heart.

21. The method of claim 20 wherein said cells are brain cells.

22. The method of claim 19 wherein said modulation is in a patient having a disorder involving hyperplasia or inflammation.